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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/506,489	02/18/2000	Hiroaki Miura	040679/1012	8527

7590 03/15/2002
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EXAMINER

PIERCE, JEREMY R

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 03/15/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

MF-9

Office Action Summary

Application No.

09/506,489

Applicant(s)

MIURA ET AL.

Examiner

Jeremy R. Pierce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 3-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of claims 1-2 in Paper No. 8 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Applicant's request for rejoinder is noted and the restriction will be re-evaluated when allowable subject matter is indicated.

Claim Rejections - 35 USC § 102/103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Matsukawa et al. (U.S. Patent No. 5,554,831).

Matsukawa et al. disclose a sound absorbing member made of polyester fibers, of which not less than 30% by weight of the polyester fibers have a fiber size of not more than 4 denier (column 3, lines 10-45), and preferably, not more than 2 denier (column 2, line 4). This covers the denier range cited by the Applicant of less than 1 denier. Matsukawa et al. teach that finer fibers offer improved sound absorbing performance (columns 1-2, lines 63-5). Thus, even without a direct citation of fiber sizes of less than 1 denier, Matsukawa et al. suggest to one skilled in the art to employ as fine a fiber that is possible, making it obvious to a person skilled in the art to use polyester fibers with a fineness less than 1 denier. Matsukawa et al. include heat-fusible fibers having a melting point at least 20° C lower than that of the polyester fiber (column 3, lines 65-67). This heat-fusible fiber can also be made of polyester, and has a fiber size of not less than 6 denier (column 4, lines 1-10). With regard to claim 2, Matsukawa et al. disclose the use of a third polyester fiber with the denier range cited by the Applicant in Examples 4-9.

Claim Rejections - 35 USC § 103

5. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holtrop et al. (U.S. Patent No. 4,851,283) in view of Yoshida et al. (U.S. Patent No. 4,529,481).

Holtrop et al. disclose a sound absorbing laminate material with a nonwoven fabric layer comprising a blend of low melting staple binder fibers and high melting staple fibers (column 2, lines 30-55). The low melting binder fibers and the high melting

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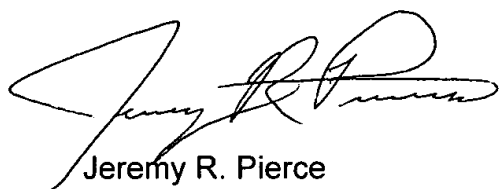
staple fibers can both be polyester. By definition, the low melting binder fibers would have a softening point less than 20° C than the high melting staple fibers (column 2, lines 20-26). Holtrop teaches the high melting staple fibers to have a denier in the range of 1 to 15, but also teaches that increasing denier of the fibers of the fabric improves the stiffness, but reduces the sound-absorbing properties (column 2, lines 56-67). Yoshida et al. disclose a synthetic polyester pulp material comprising polyester fibers of not greater than 10 microns, which, in terms of polyester, is less than 1 denier (column 3, lines 45-52). Yoshida et al. also disclose that the non-woven fabric or web is useful as sound absorbing material (column 10, lines 10-12). It would have been obvious to one skilled in the art to use polyester fibers with a denier of less than 1 in the sound absorbing laminate provided by Holtrop et al. in order to increase the sound absorbing properties of the laminate. With regard to claim 2, Holtrop et al. disclose the nonwoven fabric may contain other materials including additional staple fibers (column 3, lines 36-38). It would have been obvious to one skilled in the art to include a third polyester fiber of similar denier into the fabric in order to stabilize the sound absorbing material.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (703) 605-4243. The examiner can normally be reached on Monday-Thursday 7-4:30 and alternate Fridays 7-4.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Jeremy R. Pierce
Examiner
Art Unit 1771

March 7, 2002



TERREL MORRIS
SUPERVISORY PATENT EXAMINER
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